

CLAIMS

1. Transparent composition comprising, by weight, the total being 100%:
- 5    ◦ 5 to 40% of an amorphous polyamide (B) which results essentially from the condensation:
    - 10    > either of at least one diamine chosen from cycloaliphatic diamines and aliphatic diamines and of at least one diacid chosen from cycloaliphatic diacids and aliphatic diacids, at least one of these diamine or diacid units being cycloaliphatic,
    - 15    > or of a cycloaliphatic  $\alpha, \omega$ -aminocarboxylic acid,
    - 20    > or of a combination of these two possibilities, and
    - 25    > optionally of at least one monomer chosen from  $\alpha, \omega$ -aminocarboxylic acids or the possible corresponding lactams, aliphatic diacids and aliphatic diamines,
  - 30    ◦ 0 to 40% of a supple polyamide (C) chosen from copolymers containing polyamide blocks and polyether blocks and copolyamides,
  - 35    ◦ 0 to 20% of a compatibilizer (D) for (A) and (B),
  - 40    ◦ 0 to 40% of a supple modifier (M),
  - 45    ◦ with the condition that (C)+(D)+(M) is between 0 and 50%,
  - 50    ◦ the remainder to 100% being a semi-crystalline polyamide (A).
2. Composition according to Claim 1, in which (A) is derived from the condensation of a lactam containing at least 9 carbon atoms, an  $\alpha, \omega$ -aminocarboxylic acid containing at least 9 carbon atoms or a diamine and a diacid such that the diamine or the diacid contain at least 9 carbon atoms.
3. Composition according to Claim 1 or 2, in which (A) is PA-11 or PA-12.

4. Composition according to any one of the preceding claims, in which (A) is an equilibrated polyamide.
5. Composition according to any one of the preceding claims, in which the cycloaliphatic diamine of the amorphous polyamide (B) is isophoronediamine.
6. Composition according to any one of the preceding claims, in which (C) is a copolymer containing polyamide blocks and polyether blocks.
- 10 7. Composition according to Claim 6, in which the copolymer containing polyamide blocks and polyether blocks consists of PA-6 or PA-12 blocks and the polyether blocks are PTMG blocks.
8. Composition according to any one of Claims 1 to 5, in which (C) is a copolyamide.
- 15 9. Composition according to any one of the preceding claims, in which (A) is PA-12 and (D) is PA-11.
10. Composition according to any one of the preceding claims, in which the compatibilizer (D) is a catalysed polyamide.
- 20 11. Composition according to any one of the preceding claims, in which (A) is PA-12 and (D) is catalysed PA-11.
- 25 12. Composition according to any one of the preceding claims, in which the supple modifier (M) is chosen from ethylene-polypropylene (EPR) copolymers, EPDM copolymers grafted with maleic anhydride, ethylene/alkyl (meth)acrylate/maleic anhydride
- 30 copolymers, the latter copolymers mixed with copolymers of ethylene and of an alkyl (meth)acrylate.
13. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):
- 35       the difference to 100% of (A),  
          20 to 30% of (B),  
          0 to 40% of (C),  
          0 to 20% of (D),  
          0 to 40% of (M),

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(C)+(D)+(M) being between 0 and 50%.

14. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

5           the difference to 100% of (A),  
            5 to 40% of (B),  
            0 to 30% of (C),  
            0 to 20% of (D),  
            0 to 30% of (M),

10           (C)+(D)+(M) being between 0 and 30%.

15. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

            the difference to 100% of (A),  
15           10 to 30% of (B),  
            0 to 30% of (C),  
            0 to 20% of (D),  
            0 to 30% of (M),  
            (C)+(D)+(M) being between 0 and 30%.

20 16. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

            the difference to 100% of (A),  
            20 to 30% of (B),  
25           0 to 30% of (C),  
            0 to 20% of (D),  
            0 to 30% of (M),  
            (C)+(D)+(M) being between 0 and 30%.

30 17. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

            the difference to 100% of (A),  
            10 to 30% of (B),  
            0 to 20% of (C),  
35           0 to 20% of (D),  
            0 to 20% of (M),  
            (C)+(D)+(M) being between 0 and 20%.

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18. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

the difference to 100% of (A),  
10 to 30% of (B),  
0 to 15% of (C),  
0 to 15% of (D),  
0 to 15% of (M),  
(C)+(D)+(M) being between 0 and 15%.

19. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

the difference to 100% of (A),  
20 to 30% of (B),  
0 to 20% of (C),  
0 to 20% of (D),  
0 to 20% of (M),  
(C)+(D)+(M) being between 0 and 20%.

20. Composition according to any one of Claims 1 to 12, in which the proportions of the constituents are as follows (the total being 100%):

the difference to 100% of (A),  
2 to 30% of (B),  
0 to 15% of (C),  
0 to 15% of (D),  
0 to 15% of (M),  
(C)+(D)+(M) being between 0 and 15%.

21. Articles consisting of a composition according to any one of the preceding claims, such as plates, films, sheets, tubes or profiles, the articles obtained by injection moulding and in particular the films and sheets which are then bonded to skis.

22. Articles according to Claim 21, which are decorated, for example by sublimation, and coated with a transparent protective layer consisting of the composition according to any one of Claims 1 to 20.

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